CompTIA

Exam Questions CAS-004

CompTIA Advanced Security Practitioner (CASP+) Exam

NEW QUESTION 1

A company is looking for a solution to hide data stored in databases. The solution must meet the following requirements:

> Be efficient at protecting the production environment

> Not require any change to the application

> Act at the presentation layer

Which of the following techniques should be used?

A. Masking
B. Tokenization
C. Algorithmic
D. Random substitution

Answer: A

NEW QUESTION 2

Which of the following is the BEST disaster recovery solution when resources are running in a cloud environment?

A. Remote provider BCDR
B. Cloud provider BCDR
C. Alternative provider BCDR
D. Primary provider BCDR

Answer: B

NEW QUESTION 3

An organization's finance system was recently attacked. A forensic analyst is reviewing the contents Of the compromised files for credit card data.
Which of the following commands should the analyst run to BEST determine whether financial data was lost?

```
A.      grep -v '^4[0-9]{12}(?:[0-9]{3})?$' file

B.      grep '^4[0-9]{12}(?:[0-9]{3})?$' file

C.      grep '^6(?:011|5[0-9]{2})[0-9]{12}?' file

D.      grep -v '^6(?:011|5[0-9]{2})[0-9]{12}?' file
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 4

A security analyst detected a malicious PowerShell attack on a single server. The malware used the
Invoke-Expression function to execute an external malicious script. The security analyst scanned the disk with an antivirus application and did not find any IOCs.
The security analyst now needs to deploy a protection solution against this type of malware.
Which of the following BEST describes the type of malware the solution should protect against?

A. Worm
B. Logic bomb
C. Fileless
D. Rootkit

Answer: C

NEW QUESTION 5

A company wants to quantify and communicate the effectiveness of its security controls but must establish measures. Which of the following is MOST likely to be included in an effective assessment roadmap for these controls?

A. Create a change management process.
B. Establish key performance indicators.
C. Create an integrated master schedule.
D. Develop a communication plan.
E. Perform a security control assessment.

Answer: C

NEW QUESTION 6

The Chief information Officer (CIO) asks the system administrator to improve email security at the company based on the following requirements:
* Transaction being requested by unauthorized individuals.
* Complete discretion regarding client names, account numbers, and investment information.

* Malicious attackers using email to malware and ransomeware.
* Exfiltration of sensitive company information.
The cloud-based email solution will provide anti-malware reputation-based scanning, signature-based scanning, and sandboxing. Which of the following is the BEST option to resolve the boar's concerns for this email migration?

A. Data loss prevention
B. Endpoint detection response
C. SSL VPN
D. Application whitelisting

Answer: A

NEW QUESTION 7
A company is outsourcing to an MSSP that performs managed detection and response services. The MSSP requires a server to be placed inside the network as a log aggregate and allows remote access to MSSP analyst. Critical devices send logs to the log aggregator, where data is stored for 12 months locally before being archived to a multitenant cloud. The data is then sent from the log aggregate to a public IP address in the MSSP datacenter for analysis.
A security engineer is concerned about the security of the solution and notes the following.
* The critical devise send cleartext logs to the aggregator.
* The log aggregator utilize full disk encryption.
* The log aggregator sends to the analysis server via port 80.
* MSSP analysis utilize an SSL VPN with MFA to access the log aggregator remotely.
* The data is compressed and encrypted prior to being achieved in the cloud. Which of the following should be the engineer's GREATEST concern?

A. Hardware vulnerabilities introduced by the log aggregate server
B. Network bridging from a remote access VPN
C. Encryption of data in transit
D. Multinancy and data remnants in the cloud

Answer: C

NEW QUESTION 8
An organization wants to perform a scan of all its systems against best practice security configurations. Which of the following SCAP standards, when combined, will enable the organization to view each of the
configuration checks in a machine-readable checklist format for fill automation? (Choose two.)

A. ARF
B. XCCDF
C. CPE
D. CVE
E. CVSS
F. OVAL

Answer: BF

NEW QUESTION 9
Leveraging cryptographic solutions to protect data that is in use ensures the data is encrypted:

A. when it is passed across a local network.
B. in memory during processing
C. when it is written to a system's solid-state drive.
D. by an enterprise hardware security module.

Answer: B

NEW QUESTION 10
A large telecommunications equipment manufacturer needs to evaluate the strengths of security controls in a new telephone network supporting first responders. Which of the following techniques would the company use to evaluate data confidentiality controls?

A. Eavesdropping
B. On-path
C. Cryptanalysis
D. Code signing
E. RF sidelobe sniffing

Answer: A

NEW QUESTION 10
A developer implement the following code snippet.

```
natch (Exception e)
{
    if(log.isDebugEnabled())
    {
        log.debug("Caught InvalidODBException Exception ""
        + e.toString());
    }
}
```

Which of the following vulnerabilities does the code snippet resolve?

A. SQL inject

B. Buffer overflow
C. Missing session limit
D. Information leakage

Answer: D

NEW QUESTION 12
A company's finance department acquired a new payment system that exports data to an unencrypted file on the system. The company implemented controls on the file so only appropriate personnel are allowed access. Which of the following risk techniques did the department use in this situation?

A. Accept
B. Avoid
C. Transfer
D. Mitigate

Answer: D

NEW QUESTION 15
Technicians have determined that the current server hardware is outdated, so they have decided to throw it out. Prior to disposal, which of the following is the BEST method to use to ensure no data remnants can be
recovered?

A. Drive wiping
B. Degaussing
C. Purging
D. Physical destruction

Answer: B

NEW QUESTION 18
A company created an external application for its customers. A security researcher now reports that the application has a serious LDAP injection vulnerability that could be leveraged to bypass authentication and authorization.
Which of the following actions would BEST resolve the issue? (Choose two.)

A. Conduct input sanitization.
B. Deploy a SIEM.
C. Use containers.
D. Patch the OS
E. Deploy a WAF.
F. Deploy a reverse proxy
G. Deploy an IDS.

Answer: AE

Explanation:
A WAF protects your web apps by filtering, monitoring, and blocking any malicious HTTP/S traffic traveling to the web application, and prevents any unauthorized data from leaving the app. It does this by adhering to a set of policies that help determine what traffic is malicious and what traffic is safe.

NEW QUESTION 19
A systems administrator is preparing to run a vulnerability scan on a set of information systems in the organization. The systems administrator wants to ensure that the targeted systems produce accurate information especially regarding configuration settings.
Which of the following scan types will provide the systems administrator with the MOST accurate information?

A. A passive, credentialed scan
B. A passive, non-credentialed scan
C. An active, non-credentialed scan
D. An active, credentialed scan

Answer: D

NEW QUESTION 23
A cybersecurity analyst discovered a private key that could have been exposed.
Which of the following is the BEST way for the analyst to determine if the key has been compromised?

A. HSTS
B. CRL
C. CSRs
D. OCSP

Answer: C

NEW QUESTION 25
A company security engineer arrives at work to face the following scenario:
1) Website defacement
2) Calls from the company president indicating the website needs to be fixed Immediately because It Is damaging the brand
3) A Job offer from the company's competitor
4) A security analyst's investigative report, based on logs from the past six months, describing how lateral movement across the network from various IP addresses

originating from a foreign adversary country resulted in exfiltrated data
Which of the following threat actors Is MOST likely involved?

A. Organized crime
B. Script kiddie
C. APT/nation-state
D. Competitor

Answer: C

NEW QUESTION 26

Which of the following agreements includes no penalties and can be signed by two entities that are working together toward the same goal?

A. MOU
B. NDA
C. SLA
D. ISA

Answer: A

NEW QUESTION 29

A security architect needs to implement a CASB solution for an organization with a highly distributed remote workforce. One Of the requirements for the implementation includes the capability to discover SaaS applications and block access to those that are unapproved or identified as risky. Which of the following would BEST achieve this objective?

A. Deploy endpoint agents that monitor local web traffic to enforce DLP and encryption policies.
B. Implement cloud infrastructure to proxy all user web traffic to enforce DI-P and encryption policies.
C. Implement cloud infrastructure to proxy all user web traffic and control access according to centralized policy.
D. Deploy endpoint agents that monitor local web traffic and control access according to centralized policy.

Answer: C

NEW QUESTION 31

Immediately following the report of a potential breach, a security engineer creates a forensic image of the server in question as part of the organization incident response procedure. Which of the must occur to ensure the integrity of the image?

A. The image must be password protected against changes.
B. A hash value of the image must be computed.
C. The disk containing the image must be placed in a seated container.
D. A duplicate copy of the image must be maintained

Answer: B

NEW QUESTION 36

Given the following log snippet from a web server:

```
84.55.41.60- - [19/Apr/2020:07:22:13 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=1 AND (SELECT 6810
FROM(SELECT COUNT(*),CONCAT(0x7171787671,(SELECT (ELT(6810=6810,1))),0x71707a7871,FLOOR(RAND(0)*2))x FROM
INFORMATION_SCHEMA.CHARACTER_SETS GROUP BY x)a) HTTP/1.1" 200 166 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1; ru; rv:1.9.2.3)
Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"

84.55.41.60- - [19/Apr/2020:07:22:13 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=(SELECT 7505
FROM(SELECT COUNT(*),CONCAT(0x7171787671,(SELECT (ELT(7505=7505,1))),0x71707a7871,FLOOR(RAND(0)*2))x FROM
INFORMATION_SCHEMA.CHARACTER_SETS GROUP BY x)a) HTTP/1.1" 200 166 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1; ru; rv:1.9.2.3)
Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"

84.55.41.60- - [19/Apr/2020:07:22:13 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=(SELECT
CONCAT(0x7171787671,(SELECT (ELT(1399=1399,1))),0x71707a7871)) HTTP/1.1" 200 166 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1; ru;
rv:1.9.2.3) Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"

84.55.41.60- - [19/Apr/2020:07:22:27 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=1 UNION ALL SELECT
CONCAT(0x7171787671,0x537653544175467a724f,0x71707a7871),NULL,NULL-- HTTP/1.1" 200 182 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1;
ru; rv:1.9.2.3) Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"
```

Which of the following BEST describes this type of attack?

A. SQL injection
B. Cross-site scripting
C. Brute-force
D. Cross-site request forgery

Answer: A

NEW QUESTION 41

A company in the financial sector receives a substantial number of customer transaction requests via email.

While doing a root-cause analysis conceding a security breach, the CIRT correlates an unusual spike in port 80 traffic from the IP address of a desktop used by a customer relations employee who has access to several of the compromised accounts. Subsequent antivirus scans of the device do not return an findings, but the CIRT finds undocumented services running on the device. Which of the following controls would reduce the discovery time for similar in the future.

A. Implementing application blacklisting
B. Configuring the mall to quarantine incoming attachment automatically
C. Deploying host-based firewalls and shipping the logs to the SIEM
D. Increasing the cadence for antivirus DAT updates to twice daily

Answer: C

NEW QUESTION 46
A small business requires a low-cost approach to theft detection for the audio recordings it produces and sells. Which of the following techniques will MOST likely meet the business's needs?

A. Performing deep-packet inspection of all digital audio files
B. Adding identifying filesystem metadata to the digital audio files
C. Implementing steganography
D. Purchasing and installing a DRM suite

Answer: D

NEW QUESTION 50
An organization is referencing NIST best practices for BCP creation while reviewing current internal organizational processes for mission-essential items.
Which of the following phases establishes the identification and prioritization of critical systems and functions?

A. Review a recent gap analysis.
B. Perform a cost-benefit analysis.
C. Conduct a business impact analysis.
D. Develop an exposure factor matrix.

Answer: C

NEW QUESTION 53
A security engineer was auditing an organization's current software development practice and discovered that multiple open-source libraries were Integrated into the organization's software. The organization currently performs SAST and DAST on the software it develops.
Which of the following should the organization incorporate into the SDLC to ensure the security of the open-source libraries?

A. Perform additional SAST/DAST on the open-source libraries.
B. Implement the SDLC security guidelines.
C. Track the library versions and monitor the CVE website for related vulnerabilities.
D. Perform unit testing of the open-source libraries.

Answer: D

NEW QUESTION 58
A health company has reached the physical and computing capabilities in its datacenter, but the computing demand continues to increase. The infrastructure is fully virtualized and runs custom and commercial healthcare application that process sensitive health and payment information. Which of the following should the company implement to ensure it can meet the computing demand while complying with healthcare standard for virtualization and cloud computing?

A. Hybrid IaaS solution in a single-tenancy cloud
B. Pass solution in a multinency cloud
C. SaaS solution in a community cloud
D. Private SaaS solution in a single tenancy cloud.

Answer: D

NEW QUESTION 62
A security analyst discovered that a database administrator's workstation was compromised by malware. After examining the Jogs. the compromised workstation was observed connecting to multiple databases through ODBC. The following query behavior was captured:

```
SELECT *
from ACCOUNTS
where * regexp '^[0-9]{4}[-]+[0-9]{4}[-]+[0-9]{4}[-]+[0-9]{4}S'
```

Assuming this query was used to acquire and exfiltrate data, which of the following types of data was compromised, and what steps should the incident response plan contain?
A) Personal health information: Inform the human resources department of the breach and review the DLP logs.
B) Account history; Inform the relationship managers of the breach and create new accounts for the affected users.
C) Customer IDs: Inform the customer service department of the breach and work to change the account numbers.
D) PAN: Inform the legal department of the breach and look for this data in dark web monitoring.

A. Option A
B. Option B
C. Option C
D. Option D

Answer: D

NEW QUESTION 64
A security consultant needs to set up wireless security for a small office that does not have Active Directory. Despite the lack of central account management, the office manager wants to ensure a high level of defense to prevent brute-force attacks against wireless authentication.
Which of the following technologies would BEST meet this need?

A. Faraday cage
B. WPA2 PSK
C. WPA3 SAE
D. WEP 128 bit

Answer: C

Explanation:
WPA3 SAE prevents brute-force attacks.
"WPA3 Personal (WPA-3 SAE) Mode is a static passphrase-based method. It provides better security than what WPA2 previously provided, even when a non-complex password is used, thanks to Simultaneous Authentication of Equals (SAE), the personal authentication process of WPA3."

NEW QUESTION 65
A security engineer is reviewing a record of events after a recent data breach incident that Involved the following:
• A hacker conducted reconnaissance and developed a footprint of the company s Internet-facing web application assets.
• A vulnerability in a third-party horary was exploited by the hacker, resulting in the compromise of a local account.
• The hacker took advantage of the account's excessive privileges to access a data store and exfilltrate the data without detection.
Which of the following is the BEST solution to help prevent this type of attack from being successful in the future?

A. Dynamic analysis
B. Secure web gateway
C. Software composition analysis
D. User behavior analysis
E. Web application firewall

Answer: B

NEW QUESTION 69
A company plans to build an entirely remote workforce that utilizes a cloud-based infrastructure. The Chief Information Security Officer asks the security engineer to design connectivity to meet the following requirements:
Only users with corporate-owned devices can directly access servers hosted by the cloud provider.
User browser activity can be monitored.
Which of the following solutions would BEST meet these requirements?

A. IAM gateway, MDM, and reverse proxy
B. VPN, CASB, and secure web gateway
C. SSL tunnel, DLP, and host-based firewall
D. API gateway, UEM, and forward proxy

Answer: B

NEW QUESTION 74
A company is looking at sending historical backups containing customer PII to a cloud service provider to save on storage costs. Which of the following is the MOST important consideration before making this decision?

A. Availability
B. Data sovereignty
C. Geography
D. Vendor lock-in

Answer: B

NEW QUESTION 79
A company has hired a security architect to address several service outages on the endpoints due to new malware. The Chief Executive Officer's laptop was impacted while working from home. The goal is to prevent further endpoint disruption. The edge network is protected by a web proxy.
Which of the following solutions should the security architect recommend?

A. Replace the current antivirus with an EDR solution.
B. Remove the web proxy and install a UTM appliance.
C. Implement a deny list feature on the endpoints.
D. Add a firewall module on the current antivirus solution.

Answer: A

NEW QUESTION 83
An organization is assessing the security posture of a new SaaS CRM system that handles sensitive PII and identity information, such as passport numbers. The SaaS CRM system does not meet the organization's current security standards. The assessment identifies the following:
* 1- There will be a $20,000 per day revenue loss for each day the system is delayed going into production.
* 2- The inherent risk is high.
* 3- The residual risk is low.
* 4- There will be a staged deployment to the solution rollout to the contact center.
Which of the following risk-handling techniques will BEST meet the organization's requirements?

A. Apply for a security exemption, as the risk is too high to accept.
B. Transfer the risk to the SaaS CRM vendor, as the organization is using a cloud service.
C. Accept the risk, as compensating controls have been implemented to manage the risk.
D. Avoid the risk by accepting the shared responsibility model with the SaaS CRM provider.

Answer: A

NEW QUESTION 88
Which of the following allows computation and analysis of data within a ciphertext without knowledge of the plaintext?

A. Lattice-based cryptography
B. Quantum computing
C. Asymmetric cryptography
D. Homomorphic encryption

Answer: D

NEW QUESTION 90
The Chief information Officer (CIO) wants to implement enterprise mobility throughout the organization. The goal is to allow employees access to company resources. However the CIO wants the ability to enforce configuration settings, manage data, and manage both company-owned and personal devices. Which of the following should the CIO implement to achieve this goal?

A. BYOO
B. CYOD
C. COPE
D. MDM

Answer: A

NEW QUESTION 95
A security analyst sees that a hacker has discovered some keys and they are being made available on a public website. The security analyst is then able to successfully decrypt the data using the keys from the website. Which of the following should the security analyst recommend to protect the affected data?

A. Key rotation
B. Key revocation
C. Key escrow
D. Zeroization
E. Cryptographic obfuscation

Answer: E

NEW QUESTION 99
A user experiences an HTTPS connection error when trying to access an Internet banking website from a corporate laptop. The user then opens a browser on a mobile phone and is able to access the same Internet banking website without issue. Which of the following security configurations is MOST likely the cause of the error?

A. HSTS
B. TLS 1.2
C. Certificate pinning
D. Client authentication

Answer: A

NEW QUESTION 102
A company Invested a total of $10 million lor a new storage solution Installed across live on-site datacenters. Fitly percent of the cost of this Investment was for solid-state storage. Due to the high rate of wear on this storage, the company Is estimating that 5% will need to be replaced per year. Which of the following is the ALE due to storage replacement?

A. $50,000
B. $125,000
C. $250,000
D. $500.000
E. $51,000,000

Answer: C

NEW QUESTION 105
A company just released a new video card. Due to limited supply and high demand, attackers are employing automated systems to purchase the device through the company's web store so they can resell it on the secondary market. The company's intended customers are frustrated. A security engineer suggests implementing a CAPTCHA system on the web store to help reduce the number of video cards purchased through automated systems. Which of the following now describes the level of risk?

A. Inherent
B. Low
C. Mitigated
D. Residual.
E. Transferred

Answer: D

NEW QUESTION 110
A company hired a third party to develop software as part of its strategy to be quicker to market. The
company's policy outlines the following requirements:
The credentials used to publish production software to the container registry should be stored in a secure location.
Access should be restricted to the pipeline service account, without the ability for the third-party developer to read the credentials directly.
Which of the following would be the BEST recommendation for storing and monitoring access to these shared credentials?

A. TPM
B. Local secure password file
C. MFA
D. Key vault

Answer: D

NEW QUESTION 115
The Chief Information Security Officer of a startup company has asked a security engineer to implement a software security program in an environment that previously had little oversight.
Which of the following testing methods would be BEST for the engineer to utilize in this situation?

A. Software composition analysis
B. Code obfuscation
C. Static analysis
D. Dynamic analysis

Answer: C

NEW QUESTION 119
A customer reports being unable to connect to a website at www.test.com to consume services. The customer notices the web application has the following published cipher suite:

```
TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384 TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
Signature hash algorithm:
sha256
Public key:
RSA (2048 Bits)
.htaccess config:
<VirtualHost> *:80>
ServerName www.test.com
Redirect / https://www.test.com
</VirtualHost>
<VirtualHost _default_:443>
ServerName www.test.com
DocumnetRoot /usr/local/apache2/htdocs
SSLEngine On
...
</VirtualHost>
```

Which of the following is the MOST likely cause of the customer's inability to connect?

A. Weak ciphers are being used.
B. The public key should be using ECDSA.
C. The default should be on port 80.
D. The server name should be test.com.

Answer: A

NEW QUESTION 122
A cybersecurity engineer analyst a system for vulnerabilities. The tool created an OVAL. Results document as output. Which of the following would enable the engineer to interpret the results in a human readable form? (Select TWO.)
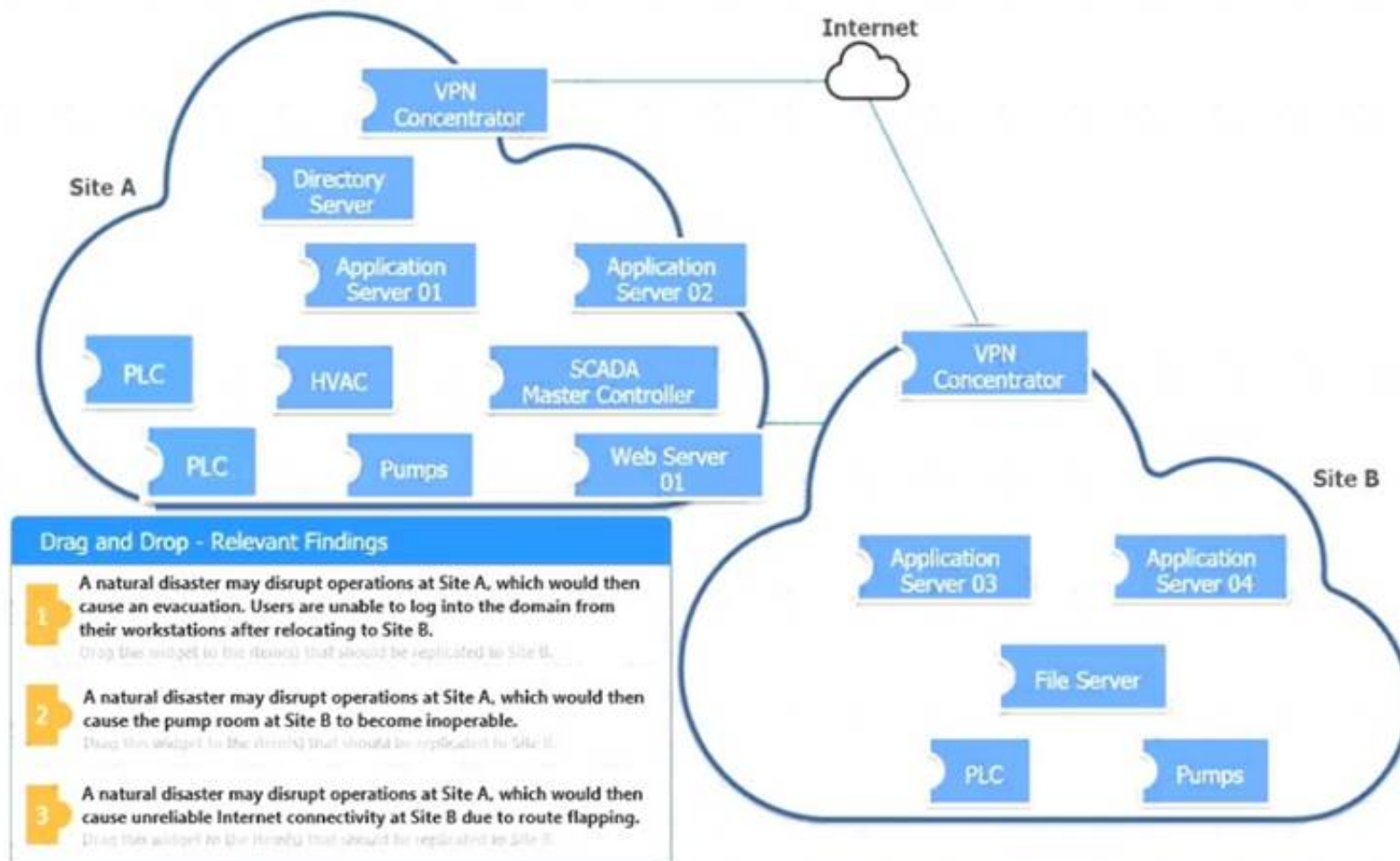
A. Text editor
B. OOXML editor
C. Event Viewer
D. XML style sheet
E. SCAP tool
F. Debugging utility

Answer: BD

NEW QUESTION 123
An organization is planning for disaster recovery and continuity of operations. INSTRUCTIONS
Review the following scenarios and instructions. Match each relevant finding to the affected host.
After associating scenario 3 with the appropriate host(s), click the host to select the appropriate corrective action for that finding.
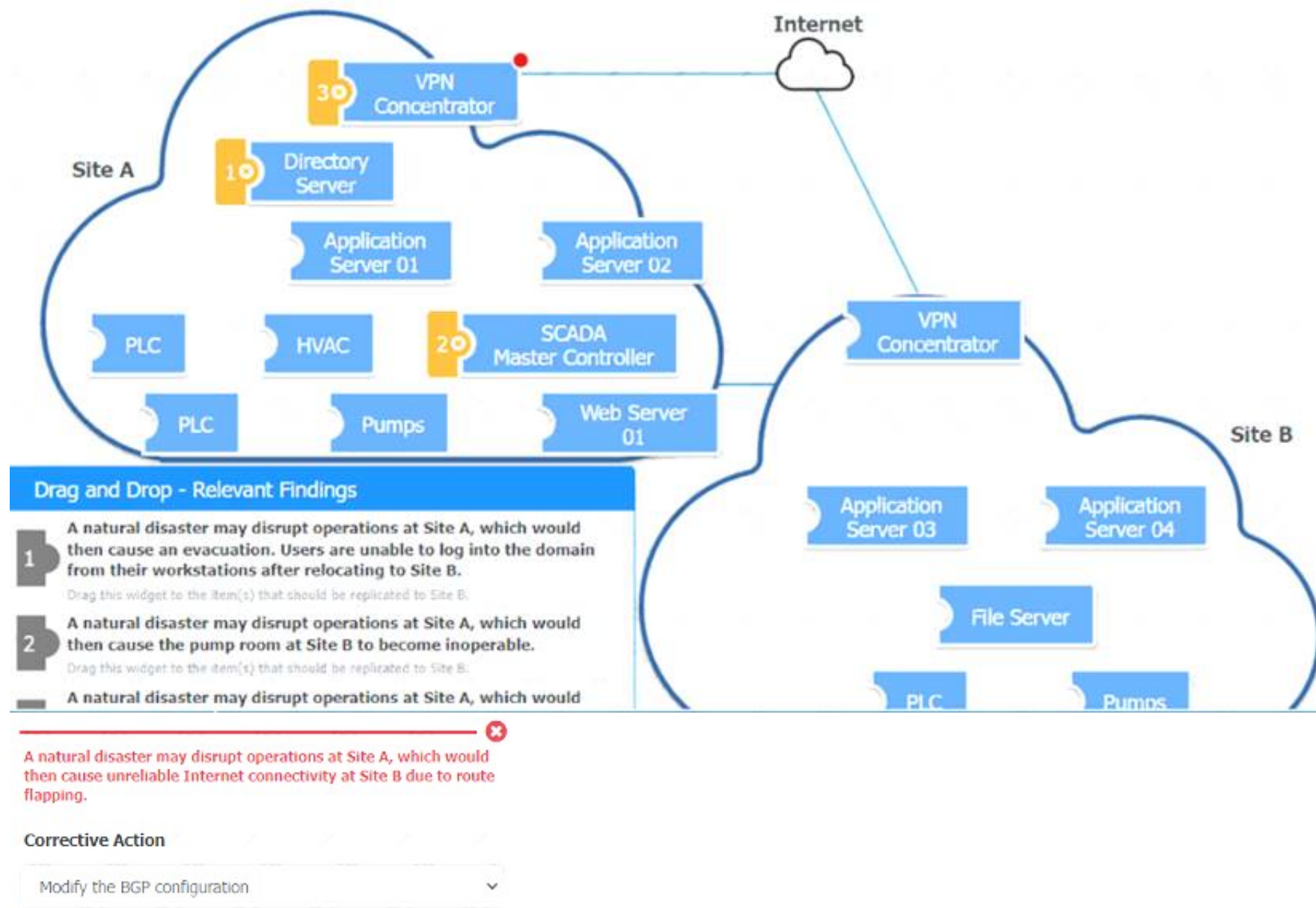Each finding may be used more than once.

If at any time you would like to bring back the initial state of the simul-ation, please click the Reset All button.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 127
Which of the following terms refers to the delivery of encryption keys to a CASB or a third-party entity?

A. Key sharing
B. Key distribution
C. Key recovery
D. Key escrow

Answer: D

NEW QUESTION 129
A security analyst is trying to identify the source of a recent data loss incident. The analyst has reviewed all the for the time surrounding the identified all the assets on the network at the time of the data loss. The analyst suspects the key to finding the source was obfuscated in an application. Which of the following tools should the analyst use NEXT?

A. Software Decomplier
B. Network enurrerator
C. Log reduction and analysis tool
D. Static code analysis

Answer: D

NEW QUESTION 130
A security architect for a large, multinational manufacturer needs to design and implement a security solution to monitor traffic.
When designing the solution, which of the following threats should the security architect focus on to prevent attacks against the network?

A. Packets that are the wrong size or length
B. Use of any non-DNP3 communication on a DNP3 port
C. Multiple solicited responses over time
D. Application of an unsupported encryption algorithm

Answer: C

NEW QUESTION 135
A security architect is tasked with scoping a penetration test that will start next month. The architect wants to define what security controls will be impacted. Which of the following would be the BEST document to consult?

A. Rules of engagement
B. Master service agreement
C. Statement of work
D. Target audience

Answer: C

NEW QUESTION 139
Which of the following is a benefit of using steganalysis techniques in forensic response?

A. Breaking a symmetric cipher used in secure voice communications
B. Determining the frequency of unique attacks against DRM-protected media
C. Maintaining chain of custody for acquired evidence
D. Identifying least significant bit encoding of data in a .wav file

Answer: B

NEW QUESTION 144
A company launched a new service and created a landing page within its website network for users to access the service. Per company policy, all websites must utilize encryption for any authentication pages. A junior network administrator proceeded to use an outdated procedure to order new certificates. Afterward, customers are reporting the following error when accessing a new web page: NET:ERR_CERT_COMMON_NAME_INVALID. Which of the following BEST describes what the administrator should do NEXT?

A. Request a new certificate with the correct subject alternative name that includes the new websites.
B. Request a new certificate with the correct organizational unit for the company's website.
C. Request a new certificate with a stronger encryption strength and the latest cipher suite.
D. Request a new certificate with the same information but including the old certificate on the CRL.

Answer: D

NEW QUESTION 146
A company's Chief Information Security Officer is concerned that the company's proposed move to the cloud could lead to a lack of visibility into network traffic flow logs within the VPC.
Which of the following compensating controls would be BEST to implement in this situation?

A. EDR
B. SIEM
C. HIDS
D. UEBA

Answer: B

NEW QUESTION 151
A developer wants to develop a secure external-facing web application. The developer is looking for an online community that produces tools, methodologies, articles, and documentation in the field of
web-application security Which of the following is the BEST option?

A. ICANN
B. PCI DSS
C. OWASP
D. CSA
E. NIST

Answer: C

NEW QUESTION 156
An organization is establishing a new software assurance program to vet applications before they are introduced into the production environment, Unfortunately. many Of the applications are provided only as compiled binaries. Which Of the following should the organization use to analyze these applications? (Select TWO).

A. Regression testing
B. SAST
C. Third-party dependency management
D. IDE SAST
E. Fuzz testing
F. IAST

Answer: DE

NEW QUESTION 157
A security analyst is reviewing network connectivity on a Linux workstation and examining the active TCP connections using the command line.
Which of the following commands would be the BEST to run to view only active Internet connections?

A. sudo netstat -antu | grep "LISTEN" | awk '{print$5}'
B. sudo netstat -nlt -p | grep "ESTABLISHED"
C. sudo netstat -plntu | grep -v "Foreign Address"
D. sudo netstat -pnut -w | column -t -s $'\w'
E. sudo netstat -pnut | grep -P ^tcp

Answer: E

NEW QUESTION 162
A company just released a new video card. Due to limited supply and nigh demand, attackers are employing automated systems to purchase the device through the company's web store so they can resell it on the secondary market. The company's Intended customers are frustrated. A security engineer suggests implementing a CAPTCHA system on the web store to help reduce the number of video cards purchased through automated systems. Which of the following now describes the level of risk?

A. Inherent Low
B. Mitigated
C. Residual
D. Transferred

Answer: A

NEW QUESTION 166
A company's claims processed department has a mobile workforce that receives a large number of email submissions from personal email addresses. An employees recently received an email that approved to be claim form, but it installed malicious software on the employee's laptop when was opened.

A. Impalement application whitelisting and add only the email client to the whitelist for laptop in the claims processing department.
B. Required all laptops to connect to the VPN before accessing email.
C. Implement cloud-based content filtering with sandboxing capabilities.
D. Install a mail gateway to scan incoming messages and strip attachments before they reach the mailbox.

Answer: C

NEW QUESTION 171
A DevOps team has deployed databases, event-driven services, and an API gateway as PaaS solution that will support a new billing system. Which of the following security responsibilities will the DevOps team need to perform?

A. Securely configure the authentication mechanisms
B. Patch the infrastructure at the operating system
C. Execute port scanning against the services
D. Upgrade the service as part of life-cycle management

Answer: A

NEW QUESTION 172
Company A acquired Company . During an audit, a security engineer found Company B's environment was inadequately patched. In response, Company A placed a firewall between the two environments until Company B's infrastructure could be integrated into Company A's security program.
Which of the following risk-handling techniques was used?

A. Accept
B. Avoid
C. Transfer
D. Mitigate

Answer: D

NEW QUESTION 176
Ann, a CIRT member, is conducting incident response activities on a network that consists of several hundred virtual servers and thousands of endpoints and users. The network generates more than 10,000 log messages per second. The enterprise belong to a large, web-based cryptocurrency startup, Ann has distilled the relevant information into an easily digestible report for executive management . However, she still needs to collect evidence of the intrusion that caused the incident. Which of the following should Ann use to gather the required information?

A. Traffic interceptor log analysis
B. Log reduction and visualization tools
C. Proof of work analysis
D. Ledger analysis software

Answer: B

NEW QUESTION 177
A Chief information Security Officer (CISO) is developing corrective-action plans based on the following from a vulnerability scan of internal hosts:

High (CVSS: 10.0)
NVT: PHP ' _php_stream_scandir()' Buffer Overflow Vulnerability (Windows) (OID: 1.3.6.1.4.1.25623.1.1.93317)
Product detection result: cpe:/a:php:php:5.3.6 by IMS Version Detection (Remote) (OID: 1.3.6.1.4.1.25623.1.3.93339)

Summary
This host is running PHP and is prone to buffer overflow vulnerability.
Vulnerability Detection ResultInstalled version: 5.3.6
Fixed version: 7.3.17/5.4.9

Impact
Successful exploitation could allow attackers to execute arbitrary code and failed attempts will likely result in denial-of-service conditions. Impact Level: system/Application

Which of the following MOST appropriate corrective action to document for this finding?

A. The product owner should perform a business impact assessment regarding the ability to implement a WAF.
B. The application developer should use a static code analysis tool to ensure any application code is not vulnerable to buffer overflows.
C. The system administrator should evaluate dependencies and perform upgrade as necessary.
D. The security operations center should develop a custom IDS rule to prevent attacks buffer overflows against this server.

Answer: A

NEW QUESTION 178
An IT administrator is reviewing all the servers in an organization and notices that a server is missing crucial practice against a recent exploit that could gain root access.
Which of the following describes the administrator's discovery?

A. A vulnerability
B. A threat
C. A breach
D. A risk

Answer: A

NEW QUESTION 179
A review of the past year's attack patterns shows that attackers stopped reconnaissance after finding a susceptible system to compromise. The company would like to find a way to use this information to protect the environment while still gaining valuable attack information.
Which of the following would be BEST for the company to implement?

A. A WAF
B. An IDS
C. A SIEM
D. A honeypot

Answer: D

NEW QUESTION 183
A threat analyst notices the following URL while going through the HTTP logs.

http://www.safebrowsing-.x/search.asp?q=<script>x=newimage;x.src="http://baddomain-/session;</script>

Which of the following attack types is the threat analyst seeing?

A. SQL injection
B. CSRF
C. Session hijacking
D. XSS

Answer: D

NEW QUESTION 188
A financial services company wants to migrate its email services from on-premises servers to a cloud-based email solution. The Chief information Security Officer (CISO) must brief board of directors on the potential security concerns related to this migration. The board is concerned about the following.
* Transactions being required by unauthorized individual
* Complete discretion regarding client names, account numbers, and investment information.

* Malicious attacker using email to distribute malware and ransom ware.
* Exfiltration of sensitivity company information.
The cloud-based email solution will provide an6-malware, reputation-based scanning, signature-based scanning, and sandboxing. Which of the following is the BEST option to resolve the board's concerns for this email migration?

A. Data loss prevention
B. Endpoint detection response
C. SSL VPN
D. Application whitelisting

Answer: A

NEW QUESTION 189
An application server was recently upgraded to prefer TLS 1.3, and now users are unable to connect their clients to the server. Attempts to reproduce the error are confirmed, and clients are reporting the following:
ERR_SSL_VERSION_OR_CIPHER_MISMATCH
Which of the following is MOST likely the root cause?

A. The client application is testing PFS.
B. The client application is configured to use ECDHE.
C. The client application is configured to use RC4.
D. The client application is configured to use AES-256 in GCM.

Answer: C

NEW QUESTION 190
An organization's finance system was recently attacked. A forensic analyst is reviewing the contents of the compromised files for credit card data. Which of the following commands should
the analyst run to BEST determine whether financial data was lost?

```
A.      grep -v '^4[0-9]{12}(?:[0-9]{3})?$' file

B.      grep '^4[0-9]{12}(?:[0-9]{3})?$' file

C.      grep '^6(?:011|5[0-9]{2})[0-9]{12}?' file

D.      grep -v '^6(?:011|5[0-9]{2})[0-9]{12}?' file
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 193
A Chief Information Officer (CIO) wants to implement a cloud solution that will satisfy the following requirements:
Support all phases of the SDLC. Use tailored website portal software.
Allow the company to build and use its own gateway software. Utilize its own data management platform.
Continue using agent-based security tools.
Which of the following cloud-computing models should the CIO implement?

A. SaaS
B. PaaS
C. MaaS
D. IaaS

Answer: D

NEW QUESTION 198
A company processes data subject to NDAs with partners that define the processing and storage constraints for the covered data. The agreements currently do not permit moving the covered data to the cloud, and the company would like to renegotiate the terms of the agreements.
Which of the following would MOST likely help the company gain consensus to move the data to the cloud?

A. Designing data protection schemes to mitigate the risk of loss due to multitenancy
B. Implementing redundant stores and services across diverse CSPs for high availability
C. Emulating OS and hardware architectures to blur operations from CSP view
D. Purchasing managed FIM services to alert on detected modifications to covered data

Answer: D

NEW QUESTION 202
A company recently acquired a SaaS provider and needs to integrate its platform into the company's existing infrastructure without impact to the customer's experience. The SaaS provider does not have a mature security program A recent vulnerability scan of the SaaS provider's systems shows multiple critical vulnerabilities attributed to very old and outdated Oss. Which of the following solutions would prevent these vulnerabilities from being introduced into the

company's existing infrastructure?

A. Segment the systems to reduce the attack surface if an attack occurs
B. Migrate the services to new systems with a supported and patched OS.
C. Patch the systems to the latest versions of the existing OSs
D. Install anti-malwar
E. HIPS, and host-based firewalls on each of the systems

Answer: B

NEW QUESTION 204
All staff at a company have started working remotely due to a global pandemic. To transition to remote work, the company has migrated to SaaS collaboration tools. The human resources department wants to use these tools to process sensitive information but is concerned the data could be:
Leaked to the media via printing of the documents Sent to a personal email address
Accessed and viewed by systems administrators Uploaded to a file storage site
Which of the following would mitigate the department's concerns?

A. Data loss detection, reverse proxy, EDR, and PGP
B. VDI, proxy, CASB, and DRM
C. Watermarking, forward proxy, DLP, and MFA
D. Proxy, secure VPN, endpoint encryption, and AV

Answer: C

NEW QUESTION 205
A financial institution has several that currently employ the following controls:
* The severs follow a monthly patching cycle.
* All changes must go through a change management process.
* Developers and systems administrators must log into a jumpbox to access the servers hosting the data using two-factor authentication.
* The servers are on an isolated VLAN and cannot be directly accessed from the internal production network. An outage recently occurred and lasted several days due to an upgrade that circumvented the approval process.
Once the security team discovered an unauthorized patch was installed, they were able to resume operations within an hour. Which of the following should the security administrator recommend to reduce the time to resolution if a similar incident occurs in the future?

A. Require more than one approver for all change management requests.
B. Implement file integrity monitoring with automated alerts on the servers.
C. Disable automatic patch update capabilities on the servers
D. Enhanced audit logging on the jump servers and ship the logs to the SIEM.

Answer: B

NEW QUESTION 209
An organization's existing infrastructure includes site-to-site VPNs between datacenters. In the past year, a sophisticated attacker exploited a zero-day vulnerability on the VPN concentrator. Consequently,
the Chief Information Security Officer (CISO) is making infrastructure changes to mitigate the risk of service loss should another zero-day exploit be used against the VPN solution.
Which of the following designs would be BEST for the CISO to use?

A. Adding a second redundant layer of alternate vendor VPN concentrators
B. Using Base64 encoding within the existing site-to-site VPN connections
C. Distributing security resources across VPN sites
D. Implementing IDS services with each VPN concentrator
E. Transitioning to a container-based architecture for site-based services

Answer: A

Explanation:
If on VPN concentrator goes down due to a zero day threat, having a redundant VPN concentrator of a different vendor should keep you going.

NEW QUESTION 213
A SOC analyst is reviewing malicious activity on an external, exposed web server. During the investigation, the analyst determines specific traffic is not being logged, and there is no visibility from the WAF for the web application.
Which of the following is the MOST likely cause?

A. The user agent client is not compatible with the WAF.
B. A certificate on the WAF is expired.
C. HTTP traffic is not forwarding to HTTPS to decrypt.
D. Old, vulnerable cipher suites are still being used.

Answer: D

NEW QUESTION 214
An analyst execute a vulnerability scan against an internet-facing DNS server and receives the following report:

- •Vulnerabilities in Kernel-Mode Driver Could Allow Elevation of Privilege
- •SSL Medium Strength Cipher Suites Supported
- •Vulnerability in DNS Resolution Could Allow Remote Code Execution
- •SMB Host SIDs allows Local User Enumeration

Which of the following tools should the analyst use FIRST to validate the most critical vulnerability?

A. Password cracker
B. Port scanner
C. Account enumerator
D. Exploitation framework

Answer: A

NEW QUESTION 215
A company's Chief Information Officer wants to Implement IDS software onto the current system's architecture to provide an additional layer of security. The software must be able to monitor system activity, provide Information on attempted attacks, and provide analysis of malicious activities to determine the processes or users Involved. Which of the following would provide this information?

A. HIPS
B. UEBA
C. HIDS
D. NIDS

Answer: B

NEW QUESTION 216
An enterprise is deploying APIs that utilize a private key and a public key to ensure the connection string is protected. To connect to the API, customers must use the private key.
Which of the following would BEST secure the REST API connection to the database while preventing the use of a hard-coded string in the request string?

A. Implement a VPN for all APIs.
B. Sign the key with DSA.
C. Deploy MFA for the service accounts.
D. Utilize HMAC for the keys.

Answer: B

NEW QUESTION 218
An attack team performed a penetration test on a new smart card system. The team demonstrated that by subjecting the smart card to high temperatures, the secret key could be revealed.
Which of the following side-channel attacks did the team use?

A. Differential power analysis
B. Differential fault analysis
C. Differential temperature analysis
D. Differential timing analysis

Answer: B

Explanation:
"Differential fault analysis (DFA) is a type of active side-channel attack in the field of cryptography, specifically cryptanalysis. The principle is to induce faults—unexpected environmental conditions—into cryptographic operations, to reveal their internal states."

NEW QUESTION 223
A security analyst is investigating a series of suspicious emails by employees to the security team. The email appear to come from a current business partner and do not contain images or URLs. No images or URLs were stripped from the message by the security tools the company uses instead, the emails only include the following in plain text.

Test email sent from bp_app01 to external client_app01_mailing_list.

Which of the following should the security analyst perform?

A. Contact the security department at the business partner and alert them to the email event.
B. Block the IP address for the business partner at the perimeter firewall.
C. Pull the devices of the affected employees from the network in case they are infected with a zero-day virus.
D. Configure the email gateway to automatically quarantine all messages originating from the business partner.

Answer: A

NEW QUESTION 224
A security analyst is concerned that a malicious piece of code was downloaded on a Linux system. After some research, the analyst determines that the suspected piece of code is performing a lot of input/output (I/O) on the disk drive.

```
procs ---------memory--------swap---io--   --system-- -----cpu------
 r b swpd free   buff   cache   si so bi     bo          in   cs    us sy id wa st
 3 0 0    44712 110052 623096 0  0  304023 30004040    217  883   13 3  83 1  0
 1 0 0    44408 110052 623096 0  0  300    200003      88   1446  31 4  65 0  0
 0 0 0    44524 110052 623096 0  0  400020 20          84   872   11 2  87 0  0
 0 2 0    44516 110052 623096 0  0  10     0           149  142   18 5  77 0  0
 0 0 0    44524 110052 623096 0  0  0      0           60   431   14 1  85 0  0
```

Based on the output above, from which of the following process IDs can the analyst begin an investigation?

A. 65
B. 77
C. 83
D. 87

Answer: C

NEW QUESTION 226
A system administrator at a medical imaging company discovers protected health information (PHI) on a general-purpose file server. Which of the following steps should the administrator take NEXT?

A. Isolate all of the PHI on its own VLAN and keep it segregated at Layer 2.
B. Take an MD5 hash of the server.
C. Delete all PHI from the network until the legal department is consulted.
D. Consult the legal department to determine the legal requirements.

Answer: A

NEW QUESTION 230
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